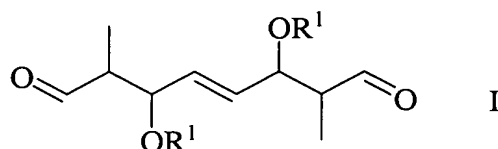


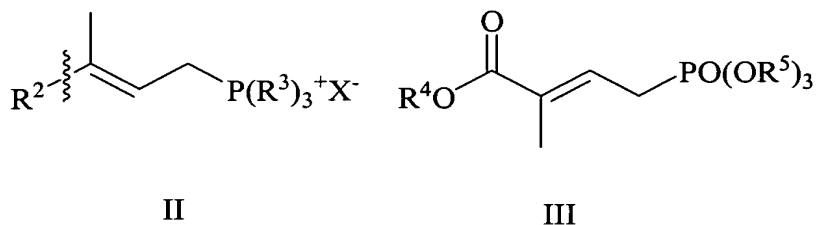
IN THE CLAIMS

Please amend the claims as follows:

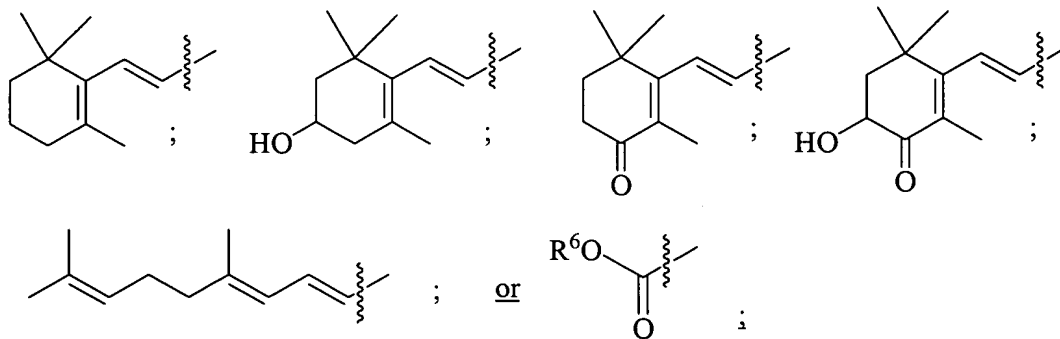
Claim 1 (Currently Amended): A process for preparing carotenoids, which comprises reacting a dialkoxo dialdehyde of the general formula I



wherein R¹ is C₁-C₆-alkyl with R¹=C₄-C₆-alkyl, in a double Wittig condensation with a phosphonium salt of the formula II or in a double Wittig-Horner condensation with a phosphonate of the formula III



~~in which the substituents have independently of one another the following meaning~~
wherein the substituents in formulas II and III, independently of one another, are defined as
follows:

 R^2 is

R³ is aryl;

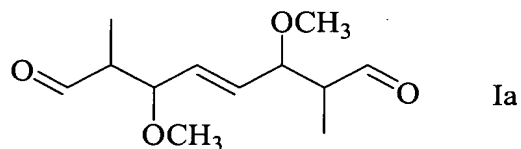
R⁴ to R⁶ are C₁-C₆-alkyl; and

X^- is an anion equivalent of an inorganic or organic acid.

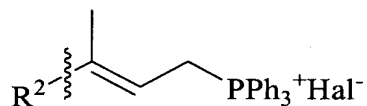
Claim 2 (Original): The process according to claim 1, wherein X^- is the anion equivalent of an acid selected from the group consisting of hydrohalic acid, sulfuric acid, phosphoric acid, formic acid, acetic acid and sulfonic acid.

Claim 3 (Original): The process according to claim 2, wherein X^- is Cl^- , Br^- , $C_nH_{2n+1}-SO_3^-$ with $n = 1-4$, $Ph-SO_3^-$, $p-Tol-SO_3^-$ or $CF_3-SO_3^-$.

Claim 4 (Currently Amended): The process according to ~~any of claims 1 to 3~~ claim 1 for preparing a carotenoid selected from the group consisting of astaxanthin, lycopene and canthaxanthin, which comprises reacting a dialkoxy dialdehyde of the formula Ia

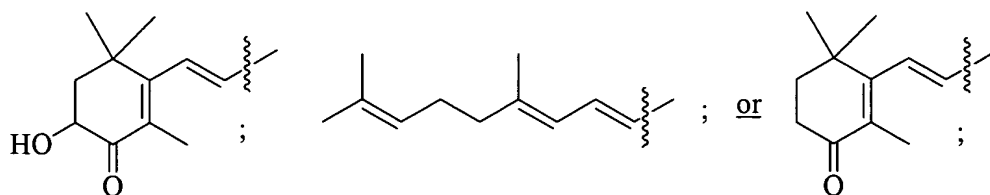


with a phosphonium salt of the formula IIa,



in which the substituents have independently of one another the following meaning:

R^2 is

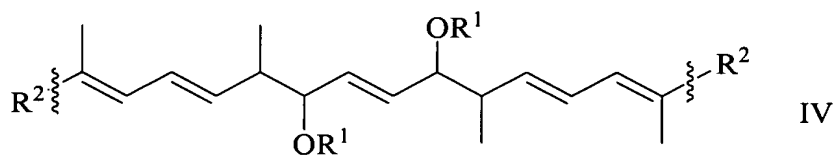


Hal is halide.

Claim 5 (Currently Amended): The process according to ~~any of claims 1 to 4~~ claim 1, wherein the reaction is carried out in a C₁-C₆ alcohol using an alkali metal or alkaline earth metal alkoxide as base.

Claim 6 (Currently Amended): The process according to ~~any of claims 1 to 5~~ claim 1, wherein the reaction product is thermally isomerized into the all(E) form and isolated by filtration.

Claim 7 (Currently Amended): Compounds of the formula IV,



wherein in which the substituents R¹ and R² have independently are independent of one another ~~the meaning stated~~ and defined in claim 1.